

WHAT IS CLAIMED IS:

1 1. A method of detecting a breast cancer cell in a biological sample from
2 a patient, the method comprising

3 contacting the sample with a polynucleotide that selectively hybridizes to a
4 nucleic acid sequence encoding a polypeptide having an amino acid sequence of SEQ ID
5 NO:2, SEQ ID NO:4, or SEQ ID NO:6; and

6 detecting an increase in the level of the nucleic acid sequence, relative to
7 normal, thereby detecting the presence of a breast cancer in the patient.

1 2. The method of claim 1, wherein the detecting step comprises detecting
2 an mRNA that encodes the polypeptide.

1 3. The method of claim 2, wherein the mRNA is detected using an
2 amplification reaction.

1 4. The method of claim 1, wherein the detecting step comprises detecting
2 an increase in copy number of the nucleic acid that encodes the polypeptide.

1 5. The method of claim 1, wherein the patient is undergoing a therapeutic
2 regimen to treat breast cancer.

1 6. The method of claim 1, wherein the patient is suspected of having
2 breast cancer.

1 7. A method of detecting a breast cancer cell in a biological sample from
2 a patient, the method comprising
3 detecting an increase in the level of a polypeptide having an amino acid
4 sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6, relative to normal, thereby
5 detecting the presence of a breast cancer in the patient.

1 8. The method of claim 7, wherein the step of detecting an increase in the
2 level of the polypeptide comprises performing an immunoassay.

1 9. A method of monitoring the efficacy of a therapeutic treatment of
2 cancer, the method comprising the steps of:

5 (ii) detecting the level of: a polypeptide having an amino acid sequence of
6 SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:6, or of a nucleic acid that encodes the
7 polypeptide, in the biological sample compared to a level in a biological sample from the
8 patient prior to, or earlier in, the therapeutic treatment, thereby monitoring the efficacy of the
9 therapy.

1 10. A method for identifying a compound that modulates a breast cancer-
2 associated polypeptide, the method comprising the steps of:

3 (i) contacting the compound with a polypeptide of SEQ ID NO:2, SEQ ID
4 NO:4, or SEQ ID NO:6; and

5 (ii) determining the functional effect of the compound upon the polypeptide.

1 11. A method of inhibiting proliferation of a breast cancer cell that
2 overexpresses a polypeptide having an amino acid sequence of SEQ ID NO:2, SEQ ID NO:4,
3 or SEQ ID NO:6, the method comprising the step of contacting the cancer cell with a
4 therapeutically effective amount of an inhibitor of the polypeptide.

1 12. The method of claim 11, wherein the gene that encodes the polypeptide
2 is increased in copy number in the breast cancer cell.

13. The method of claim 11, wherein the inhibitor is an antibody.

14. The method of claim 11, wherein the inhibitor is a small molecule.